



State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

July 22, 2005

CERTIFIED RETURN RECEIPT
7002 0510 0003 8603 4308

Ken George
Holcim (U.S) Inc.
6055 East Croydon Road
Morgan, Utah 84050

Subject: Initial Review of Notice of Intention to Revise Large Mining Operations, Holcim (U.S.) Inc., Devil's Slide Mine & Plant, M/029/001, Morgan County, Utah

Dear Mr. George:

The Division finds the revised Notice of Intention to Commence Large Mining Operations for the Devil's Slide Mine, received April 27, 2005, incomplete. In accordance with R647-4-118 this change is a revision to your current notice and will be processed and considered for approval in the same manner as the original notice, including a public comment period.

The attached comments need to be addressed prior to tentative approval. The comments are listed under the applicable Minerals Rule heading; please format your response in a similar fashion. **Address only those items requested in the attached technical review** by sending replacement pages of the original mining notice using redline and strikeout text. Please provide a response to this review by August 22, 2005.

The Division will suspend further review of the Devil's Slide mine amended Notice of Intention until your response to this letter is received. If you have any questions or wish to arrange a meeting and discuss this review please contact me, Lynn Kunzler or Doug Jensen of the Minerals Staff. Thank you for your cooperation in completing this permitting action.

Sincerely,

Susan M. White
Mining Program Coordinator
Minerals Regulatory Program

SMW:LK:jb
Attachment: Review
O:\M029-Morgan\M0290001-DevilsSlide\final\Initial rev-revise-07222005.doc

INITIAL REVIEW OF NOTICE OF INTENTION TO REVISE LARGE MINING OPERATIONS

**Holcim (U.S.) Inc.
Devil's Slide Plant & Mine**

**M/029/001
July, 22, 2005**

R647-4-104 - Operator's, Surface and Mineral Ownership

The BLM (public lands) is shown as one of the mineral owners at the site, but they are not shown as a landowner. Is the BLM a landowner of a portion of this site or just the owner of the mineral? If the BLM is a landholder within the permit area, please show the area owned by them. (DJ)

R647-4-105 - Maps, Drawings & Photographs

All the maps contained in the application have a footnote stating the contour interval on the maps is 20'. The contour interval on the map contained in the application is 50'. Please make the appropriate corrections to this footnote. (DJ)

105.1 Topographic base map, boundaries, pre-act disturbance

The base map only shows the property and lease outlines for Holcim. Because of the scale of the map, none of the other items listed as being shown on the map are discernable. The base map needs to be a larger scale in order to show the items listed in the description. I was unable to discern which areas were originally approved and the areas covered by the new proposed disturbance boundary. (DJ)

105.2 Surface facilities map

The legend on this map does not seem to correspond to items as shown on the map. Please review this map and make changes to aid in the identification of the items referred to in the legend. (DJ)

The Legend and List of Drawings shows drawing numbers corresponding to the facilities shown on the map. None of these drawings are included in the submission. Are these numbers only to be used by Holcim as internal reference? Please supply these drawings to complete the submittal or explain the reference to them in the plan. (DJ)

The plant site is surrounded by a circular designed enclosure. Please identify what this circular design is identifying. (DJ)

The map shows a well house and a water tank but does not reference any well location. Please show the location of the well or wells used to supply water to the plant site. (DJ)

Two buildings (office building & carpenter shop) are labeled in the southwest corner of the plant site but no building outline is shown. Do these buildings exist or have they been removed? Please show the general outline of these buildings, if they do exist. (DJ)

Figure 105.4 – Facility Map

This map shows the outline of the permitted areas (old and new). The proposed disturbance outline excludes the plant site, village and the 184.5 acre area permitted for the dump expansion. The village and the plant site should be shown within this line to include them in the area that Holcim is permitted to disturb. It was the Division's understanding that this application would include the dump expansion area and the mine/plant in one plan. If this is still Holcim's plan, the dump area should be included in the total acreage of the proposed disturbance. (DJ)

A reclamation treatments map should be included in the plan. This map should show areas of the site to receive various reclamation treatments shaded, cross-hatched or color coded to identify which reclamation treatments will be applied. Areas would include: buildings, stationary mining/processing equipment, roads, utilities, proposed drainage improvements or reconstruction and sediment control structures, topsoil storage area, waste dumps, processed waste facilities, disposal areas for overburden, solid and liquid wastes areas, ponds, treatment and containments facilities. Reclamation treatments may include ripping, regrading, replacing soil, fertilizing, mulching, broadcast seeding, drill seeding or hydroseeding. (DJ)

Figure 105.5 – Final Quarry Map

The legend on this map indicates that a total proposed disturbance at the site is 526.6 acres but the entry below the legend indicates that the total area of reclamation is 577.5 acres. Please review these figures and correct the incorrect number. (DJ)

The text indicates that this map shows areas of the site which are to receive differing reclamation treatments. The map does not show what reclamation treatments will be applied anywhere on the site. Please show these treatments on the requested Reclamation Treatments Map. (DJ)

The text also indicates that a border clearly outlining the extent of the area to be reclaimed and a border clearly outlining rock outcrops areas which the operator is requesting a variance for exemption from reclamation. Neither of these items are shown on this map. Please include these items. (DJ)

The highwalls, which are to remain steeper than 45 degrees, should be highlighted (DJ)

The text indicates that this map was prepared to show the final mine plan. The contours on this map are the same as other contour maps contained in the plan. It also carries a notation stating "the areas have changed since previously mapped but was not updated for the 2004 mapping". Please clarify whether the contours shown on Figure 105.5 is in fact the final pit contours after mining has been completed. (DJ)

R647-4-106 - Operation Plan

106.2 Type of operations conducted, mining method, processing etc.

The plan states the slope faces of the benches will be designed at a 3h:1v and all other slopes will be 35 degrees. Rules require that all highwall be left at a slope angle of 45 degrees or less, unless long-term stability can be demonstrated. In order to approve a variance to leave highwall slopes at an angle greater than 45 degrees, a study will need to be conducted to prove that the material that will form the final highwall will be stable at a 35 degree slope angle. Until this study is completed, final highwalls will need to be designed at a 45 degree angle. (DJ)

The plan states Appendix 1 contains cross-sectional views of the final pit topography, post-mining, of quarries 1, 2, & 3. There are no cross-sections contained in Appendix 1. Please submit these cross-sections for the Division's review. Also please label on the maps the location of quarries 1, 2, & 3. (DJ)

106.3 Estimated acreages disturbed, reclaimed, annually.

The estimated area disturbed for the areas within the permit are listed as:

Areas of actual mining -- 543.23 acres,
overburden waste dump -- 184.5 acres,
Cement plant facilities -- 71.8 acres,
area known as the village -- 20.3 acres
for a total acreage of 819.83 acres

Figure 105.5 carries a notation the total area of reclamation of 577.5 acres. The legend shows these areas to be 525.6 acres of mining and 51.9 acres of plant site. The acreage figure shown on the map and those shown under this portion of the plan do not agree. Please explain the differences. Why aren't the acreages of the village and the overburden dump included in the total acres to be reclaimed? (DJ)

106.5 Existing soil types, location, amount

The NOI indicates that a soil survey will be completed the summer after plan approval. Please note, the plan cannot be approved until the soil survey is submitted and reviewed, to assure available soils are salvaged and properly stockpiled (and protected) so they are available for reclamation, and that appropriate and adequate substitute materials are available to make up soil shortfalls for reclamation. The soil survey information and plans should be submitted ASAP. (LK)

106.6 Plan for protecting & redepositing soils

Please refer to comments under R647-4-106.5. (LK)

106.7 Existing vegetation - species and amount

As discussed with the soils survey, the Division cannot issue final approval until the vegetation survey data is submitted and reviewed. This data is needed to evaluate revegetation plans and establish the reclamation success standard. The vegetation data should be submitted ASAP. (LK)

106.9 Location & size of ore, waste, tailings, ponds

The plan indicates that kiln dust is presently stockpiled in an area topographically lower in the valley than the area described in the 1987 reclamation plan. Please show this location of this stockpile on the surface facilities map. (DJ)

R647-4-107 - Operation Practices

107.2 Drainages to minimize damage

The current plan does not have enough specific information to identify any updated hydrologic plans currently in place for the quarry and plant site. Please provide the necessary detail to identify culvert locations and surface water diversion and ponds in all areas of the quarry and plant site as they currently exist or identify any changes to the current plan that have been implemented since the original plan was approved except for the overburden dump area, the Division reviewed in 2002. (TM)

107.5 Suitable soils removed & stored

Please refer to comments under R647-4-106.5. (LK)

R647-4-109 - Impact Assessment

109.3 Impacts on existing soils resources

This section cannot be evaluated until the soil survey is submitted and reviewed (refer to R647-4-106.5. (LK)

109.4 Slope stability, erosion control, air quality, safety

Waste dumps at the site will be required to be recontoured to a slope angle of ~3:1 to allow for revegetation and provide long term stability. (DJ)

R647-4-110 - Reclamation Plan

110.2 Roads, highwalls, slopes, drainages, pits, etc., reclaimed

As stated above, in order for Holcim to leave highwalls at a 3V:1H a study will be needed to demonstrate that the material that will form this highwall will be able to provide long-term stability. (DJ)

The plan states pit slopes will be left steeper than 3h:1v. They will be left at an angle of 35 degrees. Please describe the difference between a pit slope and a highwall. (DJ)

110.3 Surface Facilities Reclaimed

On page 14 of the Notice, under this heading it states that the plant facilities may remain ... after adjacent quarries have been abandoned and reclaimed. Please note, the Division requires reclamation of all mining related disturbances and facilities, unless at the time of reclamation there is a demonstrated use and need for certain facilities to remain. Please plan to reclaim (and include reclamation costs in the surety) for all facilities. (DJ & LK)

110.5 Revegetation planting program

The benches in the disturbed areas will be ripped and rough graded to facilitate revegetation. Please show the benches to be revegetated on the final pit map. (DJ)

The variance as granted in the 1987 approval did not envision a pit disturbance which is contained in this application. Unless the rock outcrop areas not to be revegetated as outlined in the 1987 reclamation plan will still exist when the new pit disturbance is completed, this variance does not apply. A new variance will need to be applied for to cover rock outcrops that will be impacted by this application. (DJ)

The removal and stockpiling of soil does not need to wait for a vegetation and soil survey. At the present time there are no soil stockpiles within the pit disturbance therefore all soils encountered during mining should be stockpiled. This practice should begin immediately. (DJ)

R647-4-111 - Reclamation Practices

111.12 Topsoil redistribution

Please refer to comments under R647-4-106.5. (LK)

R647-4-112 - Variance

A variance to leave the highwall cannot be granted until the operator submits a study which demonstrates that the material that will form the highwall will remain stable. I was unable to locate the highwalls covered by this variance request on Figure 105.5 (DJ)

R647-4-113 - Surety

Because of the complexity of the surety, this portion of the application is still being evaluated. The Division will evaluate this item as time allows. (DJ)

Confidential Information

Page 17 of the NOI indicates that confidential information is enclosed. However, the information you may wish to be held as confidential is not marked. Please mark those items which are to be held as confidential and place them in a separate section or binder. (Note: only information relating to the location, size, or nature of the deposit may be protected as confidential). (LK)